ABSTRACT

A unique solid flat panel lighting emitting luminaire (light panel) has been created that utilizes a light source remote from the luminaire. The light panel luminaire is fed light flux via a light pipe and/or a fiber optic system into one or two edges of the flat panel. The light panel has imbedded irregular tapered tetrahedron shaped light guides that emit light in a uniform controlled fashion over the length of the emitting surface. The subject lighting luminaire provides light without generating heat. The luminaire is unaffected by environmental temperatures and pressures within the boundaries of the base construction materials utilized. The luminaire is specifically designed to provide general or task lighting in any application that would normally use a fluorescent, filament or arc type light bulb without the inherent limitations of usual light sources such as space requirements, access, heat generation, environmental temperature, moisture sensitivity, possible explosive ignition and/or crush or explosion due to hypo or hyper baric pressures.